STATIC ANALYSIS BASED ERROR REDUCTION FOR SOFTWARE APPLICATIONS

ABSTRACT OF THE DISCLOSURE

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A system and method for providing "static analysis" of programs to aid in improving runtime performance, stability, security and privacy characteristics of deployed application code. The method includes performing a set of analyses that sifts through the program code and identifies programming security and/or privacy model coding

10 errors. In particular the invention focuses on identifying coding errors that cause loss of correctness, performance degradation, security, privacy and maintainability vulnerabilities. A deep analysis of the program is performed using detailed control and data flow analyses. These deeper analyses provide a much better perspective of the overall application behavior. This deep analysis is in contrast to shallow analyses

15 in current industry tools, which inspect or model a single or a few classes at a time.